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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/772,598 | 01/30/2001 | Timothy E. Benson | 6315.N | 2967 |

26813 7590 09/29/2004

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EXAMINER

MAHATAN, CHANNING

ART UNIT PAPER NUMBER

1631

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/772,598

Applicant(s)

BENSON ET AL.

Examiner

Channing S Mahatan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 39-43, 54, 55 and 58-61 is/are allowed.
- 6) ☒ Claim(s) 44-53, 56, 57 and 62-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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DETAILED ACTION

APPLICANTS' ARGUMENTS

Applicants' arguments, filed 20 July 2004, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

CLAIMS UNDER EXAMINATION

Claims herein under examination are claims 39-65. Claims 1-38 and 66 have been cancelled.

DECLARATION UNDER 37 C.F.R. § 1.132

Applicants' declaration (filed 20 July 2004) executed by Applicant's Representative stating that the amendatory material consists of the same material incorporated by reference in the referencing application is approved.

Claims Rejected Under 35 U.S.C. § 112 1st Paragraph

The rejection of claims 44-53, 56, 57, and 62-65 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement are maintained for reasons of record. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants state that they do not understand the intended meaning of the Examiner's statement:

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“the production of one crystal does with one particular characteristic (space group symmetry, unit cell dimensions, structure coordinates, etc.) does not establish contemplation of all crystals (i.e. *Staphylococcus aureus* NAD synthetase) having some or all of the characteristics” (page 6, lines 1-6 of the Office action mailed 20 April 2004).

and argue claims 44-53, 56, 57, and 62-65 are drawn only to methods of forming crystals having the specific recited characteristics (i.e. monoclinic space group symmetry $P2_1$) with support to be found on page 9, lines 8-13, originally filed claim 35, and page 42, lines 6-7). However, this is found unpersuasive and further clarification is provided for below.

The introduction of claims 44-53, 56, 57, and 62-65 in the amendment filed 08 January 2004 and current amendment filed 20 July 2004 is considered new matter, since there did not appear any disclosure or contemplation of the broadly encompassing crystallization conditions that would result in a crystal of *Staphylococcus aureus* NAD synthetase with, for example, an monoclinic space group symmetry $P2_1$. The specification discloses only a forward method of crystallizing *Staphylococcus aureus* NAD synthetase by only one specific set of crystallization conditions (page 41, lines 2-11; page 41, lines 20-25; page 41-42, lines 31 and 1, respectively; and page 42, lines 4-7 of the specification) that is then determined after obtainment of the crystal to have specific crystal characteristics, for example, monoclinic space group symmetry $P2_1$. Absent is contemplation for initially seeking a crystal of *Staphylococcus aureus* NAD synthetase that would result in a crystal having, for example, monoclinic space group symmetry $P2_1$ and crystallization conditions to obtain these said crystals (i.e. all others). For instance (referring to claim 44), the specification fails to teach obtaining a *Staphylococcus aureus* NAD synthetase crystal having monoclinic space group symmetry $P2_1$ formed in a solution with only 5% by weight polyethylene glycol (0 wt. % dimethyl sulfoxide). Thus, the claims broadly encompass all crystallization conditions for crystallizing *Staphylococcus aureus* NAD synthetase beyond

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that taught within the specification, wherein the production of one crystal with particular characteristics does not establish contemplation of all crystals have some or all of the characteristics. Therefore, claims 44-53, 56, 57, and 62-65 are considered NEW MATTER.

ALLOWABLE CLAIMS

Claims 39-43, 54, 55, and 58-61 are found allowable.

ACTION IS FINAL

THIS ACTION IS MADE FINAL. Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 C.F.R. § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

EXAMINER INFORMATION

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and

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1157 OG 94 (December 28, 1993) (See 37 C.F.R. § 1.6(d)). The CM1 Fax Center number is either (703) 872-9306.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Channing S. Mahatan whose telephone number is (571) 272-0717. The Examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Woodward, Ph.D., can be reached on (571) 272-0722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify Applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables Applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

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For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Date: *September 22, 2004*

Examiner Initials: *CSM*

Marianne P. Allen
MARIANNE P. ALLEN
PRIMARY EXAMINER

9/27/04

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